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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yoshiro SHIOKAWA, Megumi NAKAMURA,  
Tohru SASAKI and Toshihiro FUJII

Application No.: New US Patent Application

Filed: June 1, 2001

Docket No.: 109675

For: METHOD AND APPARATUS FOR ION ATTACHMENT MASS SPECTROMETRY

PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office  
Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

Please replace claims 3, 4, 8 and 12 as follows:

*Surf. Det.*  
*AT*

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3. (Amended) A method of ion attachment mass spectrometry as set forth in  
claim 1, wherein a quantitative value is calculated for said each component using sensitivity  
corresponding to the total pressure during measurement.

4. (Amended) A method of ion attachment mass spectrometry as set forth in  
claim 1, wherein the total pressure during the measurement is set within an allowable  
fluctuation of total pressure.

*obj. part*

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8. (Amended) An apparatus for ion attachment mass spectrometry as set forth in  
claim 6, further provided between said reaction chamber and said analysis chamber with a  
differential evacuation chamber of a reduced pressure atmosphere for connecting said two  
chambers in a vacuum state.

*sub b/c*  
*a3*  
12 (Amended) An apparatus for ion attachment mass spectrometry as set forth in  
claim 10, wherein

*a3*  
the allowable fluctuation of total pressure is calculated from a rate of change of  
sensitivity corresponding to the total pressure of said reduced pressure atmosphere during the  
measurement and a required quantitative error value.

Please add new claims 13-16 as follows:

*a3*  
13. A method of ion attachment mass spectrometry as set forth in claim 2, wherein a  
quantitative value is calculated for said each component using sensitivity corresponding to the  
total pressure during measurement.--

*a4*  
14. A method of ion attachment mass spectrometry as set forth in claim 2, wherein  
the total pressure during the measurement is set within an allowable fluctuation of total  
pressure.--

*a4*  
15. An apparatus for ion attachment mass spectrometry as set forth in claim 7,  
further provided between said reaction chamber and said analysis chamber with a differential  
evacuation chamber of a reduced pressure atmosphere for connecting said two chambers in a  
vacuum state.--

*a4*  
16. An apparatus for ion attachment mass spectrometry as set forth in claim 11,  
wherein

the allowable fluctuation of total pressure is calculated from a rate of change of  
sensitivity corresponding to the total pressure of said reduced pressure atmosphere during the  
measurement and a required quantitative error value.--

#### REMARKS

Claims 1-16 are pending. Claims 3, 4, 8 and 12 are amended to eliminate multiple  
dependencies and claims 13-16 are added to compensate for subject matter deleted from